## High Performance Wire-speed Architecture:

+ Non-blocking Architecture
+ 4 Hardware Priority Queues
+ 802.1x Authentication
+ 802.1p QoS
+ 802.1Q VLAN
+ Link Aggregation
+ SNMP v1
+ 802.1D Spanning Tree
+ Jumbo Frame Support
+ Port Mirroring
+ Port Setting (Speed, Availability, Flow Control)
+ Web-based Management
+ Auto Discovery Utility
+ IGMP Snooping
+ D-Link Safeguard Engine

## Operational Simplicity:

+ True Plug & Play
+ Auto-negotiation
+ Clear, At-a-glance per Port LED Indicators
+ Auto MDI/MDI-X Detection

## Investment Protection:

+ Support for Industry Standards
+ Fiber Media Support Via SFPs

# Web Smart 16-Port Gigabit Switch with 2 Combo SFP Ports

The D-Link Web Smart Gigabit Switch (DGS-1216T) blends plug-&-play simplicity with exceptional performance and reliability to create a cost-effective solution for bandwidth-starved workgroups and departments. The DGS-1216T provides a solution for any size business with any size need. It supports 2 Combo fiber SFP uplinks for uplinking to servers, storage, or other switching devices providing superior performance with exceptional value. The DGS-1216T delivers a high performance feature set sufficient to monitor and secure a SMB network efficiently.

### Advanced Management Features

The Web Smart DGS-1216T supports SNMP v1. SNMP is a useful tool in managing and controlling SNMP supported network devices. SNMP enables the Web Smart DGS-1216T to be polled to provide valuable information about the status of the unit and send traps on abnormal events. This sharing of vital management information saves time and money.

The DGS-1216T also supports Spanning Tree, provides protection from unintentional cabling loops forming within a network infrastructure. 802.1D Spanning tree detects and breaks these loops ensuring network uptime.

### Advanced Security

The DGS-1216T provides a robust set of security features normally found only in fully managed switching solutions. It is equipped with the D-Link Safeguard Engine to protect the CPU from malicious attack. When frames enter the switch, the D-Link Safeguard Engine detects and blocks broadcast, multicast, and unicast flooding which can overload a CPU and bring network traffic to a halt. In addition, the DGS-1216T also provides support for secure encrypted 802.1x port based user authentication, broadcast storm control, and up to 256 static MAC address entries.

### IEEE 802.1Q VLAN Tagging

A VLAN (Virtual LAN) is a collection of computers that are grouped together. VLANs allow the network to be segmented into groups (Departmental, Hierarchical, and Security Groups). 802.1Q is a standard that places a "tag" in a frame identifying which VLAN it belongs to. The advantage of this is that all 802.1Q compliant devices can work seamlessly together to manage VLAN traffic.

### 802.1p Priority Tagging

Like 802.1Q VLAN tagging, 802.1p places a tag in a frame to indicate the priority of the frame. This differs from port-based QoS in that, in port based QoS, all traffic entering a specific port is prioritized the same way with the same value. In 802.1p, a port can receive frames with varying priority tags and classify them based on these tags. For example, a VoIP phone that supports 802.1p can assign a priority to its VoIP traffic. When it enters the switch, the switch can then prioritize it so that voice traffic is always clear and jitter-free.

### Link Aggregation

The DGS-1216T supports static link aggregation. Link aggregation provides a means of "trunking" multiple ports together to function as a single large bandwidth channel. When a high-bandwidth channel is needed to uplink to another switch, link aggregation makes this process simple and hassle-free.

### Jumbo Frame Support

Jumbo Frame support is designed to improve network throughput and significantly reduce the CPU utilization of large file transfers (such as multimedia files or large data files) by enabling more efficient larger payloads per packet. The DGS-1216T supports Jumbo Frames up to 10KB in size.

### Web Management Utility

The DGS-1216T includes the D-Link Web Smart Management Utility. This utility provides a valuable tool in managing, planning, and troubleshooting network configurations.

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Managing a DGS-1216T Web Smart switch takes only minutes. With full color graphic pictures, diagrams, and easy to understand navigation menus, using the Web Smart Management Utility is as easy as surfing the Internet. Some of the features include:

Discovery List – Every Smart DGS-1216T comes with auto-discovery software that automatically detects and displays up to 254 D-Link Web Smart switches running on your network along with a list of their MAC addresses.

Monitor List - The DGS-1216T can be monitored for status and trap messages sent to a designated station.

Trap View – When an abnormal event occurs on the switch, traps can be set to notify the system administrator.

Device Setting – The Device Setting feature of the Web Management Utility allows the network administrator to set the IP Address, Subnet Mask, Gateway, Send Trap To Address, System name, password, and Location of the DGS-1216T

With an easy to use web-based interface and a robust feature set, the DGS-1216T makes a great solution for any growing business.

## Technical Specifications

### Product/Performance Specifications

| | |
|---|---|
| DGS-1216T | (16) Ports 10/100/1000Mbps with (2) Combo SFP Expansion Slots |
| MAC Address Table Size | 8K |
| Switch Fabric | 32Gbps Forwarding Capacity |
| Transmission Method | Store-and-forward |
| Diagnostic LEDs | Per Unit: Power |
| | Per Port: Activity/Link & Speed |
| Packet Buffer | 512KB |
| Port Trunking | 3 Groups/8 ports per group |
| QoS 802.1p | 802.1p (4 Queues) WRR |
| VLANs | 802.1Q (255 Static) |

### Interface Options

| | |
|---|---|
| RJ-45 | 10BASE-T, 100BASE-TX & 1000BASE-T Universal UTP Cable Recognition for Straight-Through or Crossover Cables (MDI/MDI-X) |
| LC | One optional SFP transceiver |

### Network Protocol and Standards

| | |
|---|---|
| IEEE | 802.3 Ethernet, 802.3u Fast Ethernet, 802.3x Flow Control & 802.3ab Gigabit Ethernet, 802.1P QoS, 255 802.1Q VLANs, Link Aggregation, 802.1D Spanning Tree, SNMP v1, Port Mirroring (one-to-one/many-to-one), Jumbo Frames up to (10240Bytes), Port Setting on speed, flow control and on/off, central logging, Switch Discovery management utility, web based management, Password control access, 802.1x port based Access control, broadcast storm control, static MAC up to 256 entries), D-Link safeguard engine, DHCP client, IGMP Snooping. |

### Electrical & Emissions Summary

| | |
|---|---|
| Emissions | CE Mark A, FCC Class A |
| Power Supply | 100- 240VAC, 50/60Hz Internal Universal Power |

### Safety Agency Certifications and Environmental

| | |
|---|---|
| Safety | CUL, RoHS compliant, VCCI |
| Temperature | Operating: 0˚ – 40˚ C (32˚ – 104˚F) |
| | Storage: -10˚ – 70˚C (14˚ – 158˚F) |
| Humidity | Operating: 10% to 90% RH & Non-Condensing |
| Heat Dissipation | 103.32 BTU/hr |

# 16-Port Gigabit Switch with 2 Combo SFP Ports

| Physical Specifications | |
|---|---|
| Dimensions (W x D x H) | 17.36 x 8.27 x 1.73in (440 x 210 x 44mm)19-inch rack-mount width, 1.0U height |
| Weight | 6 lbs (2.832 kg) |
| Power Consumption | 30.3 Watts |
| **Warranty and Support Information** | |
| Warranty[1] | 5-Year Limited Warranty for as long as the original customer/end user owns the product. (Excludes Power and Fan) |
| **Ordering Information** | |
| Part Number | Description |
| DGS-1216T | Web Smart (16) Ports 10/100/1000Mbps with (2) Combo SFP Expansion Slots |
| DEM-310GT | 1000BASE-LX 3.3V Mini GBIC/SFP transceiver Up to 550m (Multimode) Up to 10km (Singlemode) |
| DEM-311GT | 1000BASE-SX 3.3V Mini GBIC/SFP transceiver Up to 220m/550m (Multimode) |

[1] 5-Year Limited Warranty available only in the U.S.A and Canada.



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